

CLEANING MACHINES



Application

The FP SPOMAX's Double Deck Dry Destoner is a modern grain cleaning machine. The features include high performance, small overall dimensions and low power and air consumption. Due to two sieve decks, the machine is able to separate grain into two fractions: heavy and light, with simultaneous separation of higher density material such as stones, pieces of metal and glass from corn or other grain products.

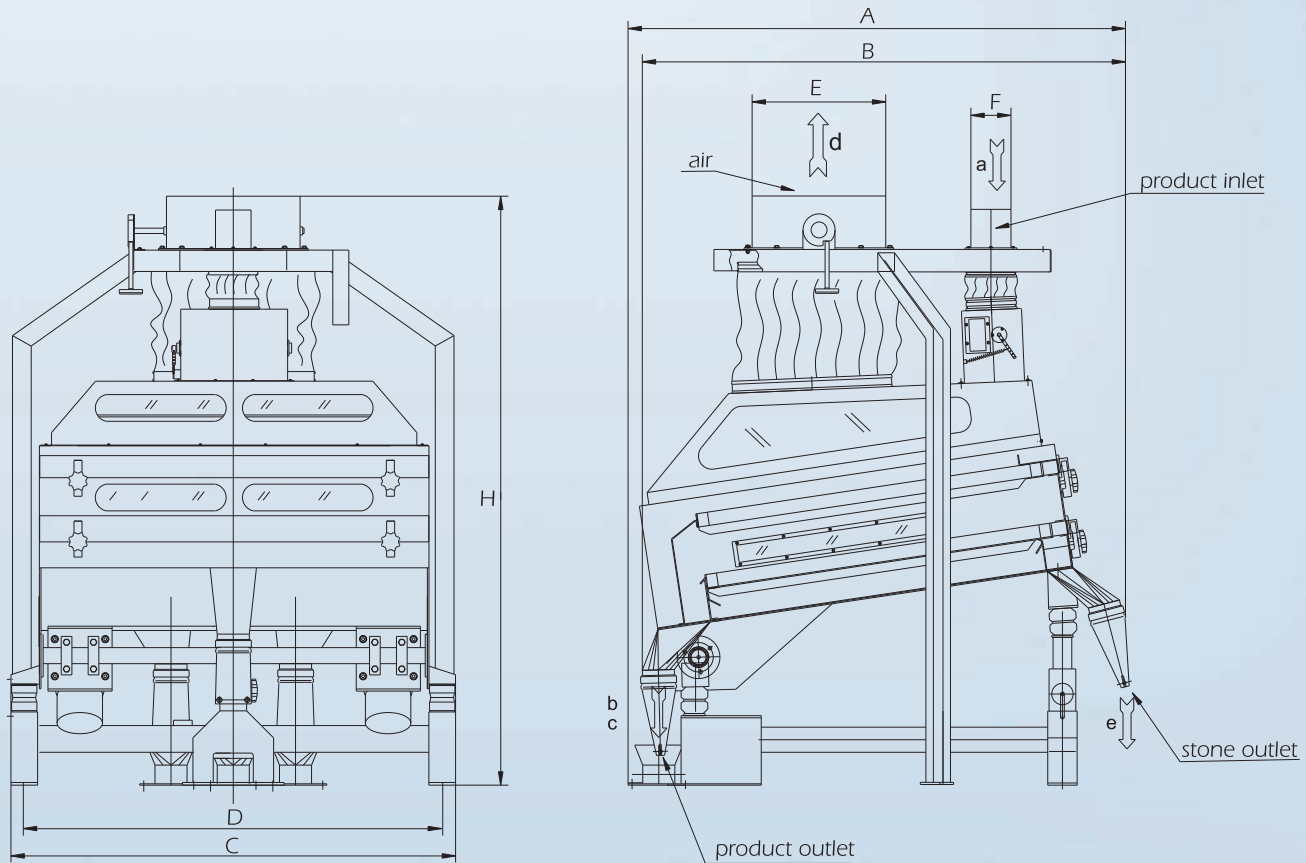
Operation

Product intended for cleaning is gravitationally fed through the inlet to the top sieve. The product, through directing elements located in the cover, is uniformly distributed on the whole sieve's width. Due to vibratory movement and impact of even air stream passing from down to the top through both sieves and forming air cushions over top and bottom sieve, the product is spread on the whole sieve surface. Air cushion created over the top sieve lifts the light fraction to the outlet "b", heavy fraction and stones get through top sieve perforated sheet metal holes to the bottom sieve lapped with wire mesh. On the bottom sieve, air cushion lifting the product, that is transported to the outlet "c", allows stones that contact the sieve due to vibratory movement, to move upwards to the outlet "e".

In order to achieve optimum selection rate, inclination angle and air quantity can be adjusted, as needed.



Double deck dry destoner SOK



Type	A	B	C	D	øE	øF	H
SOK-15K	1665	1610	1464	1354	500	150	2175
SOK-20K	1862	1808	1664	1554	500	150	2204

Construction

Basic assemblies of the Double Deck Dry Destoner include:

- body with installed sifting frames (frames dimensions for SOK-15K: width = 1245 mm, length = 1100 mm; for SOK-20K: width = 1445 mm, length = 1300 mm); frames are protected with bars allowing easy inserting and taking out of sifting frames;
- body elements also include:
 - product outlet:
 - light fraction "b",
 - heavy fraction "c",
 - stone outlet "e",
- cover with sight glasses to observe sieve operation,
- product inlet with flap valve regulated by return spring,
- supporting frame with shock absorbers,
- drive assembly inducing vibratory movement of the device,
- supporting structure with installed:
 - product inlet pipe "a",
 - air outlet "d" with regulated flap by means of regulating assembly,
 - manometer,
- outlet channel,
- stone container.

Type	Capacity for wheat [t/h]	Air demand [m ³ /min]	Resistance [Pa]	Installed power [kW]	Weight [kg]
SOK-15K	15	130	max 1200	2x0,68	673
SOK-20K	20	150	max 1200	2x0,68	797

Sieve Separator SSW with Pneumatic Channel KPO



Application

The FP SPOMAX's Sieve Separator is designed for separating and removing impurities smaller and bigger as well as lighter than the grain being cleaned by means of pneumatic channel.

Construction

Basic elements of the separator are:

- body with sieve decks - upper and lower; the sieve decks are protected with blocking beams; dimensions of the sieve:
 - width = 995 mm, length = 1000 mm for SSW100/100,
 - width = 995 mm, length = 1500 mm for SSW100/150,
 - width = 995 mm, length = 2000 mm for SSW100/200,
 - width = 1495 mm, length = 2000 mm for SSW150/200,

Sieve deck as a standard consists of one or two sieves 750 mm or 1000 mm long. If there is a limited space for sieve disassembly on site, a different division can be made on request.

Elements of the body are also:

- product outlet,
- outlets of impurities
 - bigger than grain,
 - smaller than grain,
- product inlet,
- supporting frame with shock absorbers,
- drive assembly forcing the vibratory movement of the machine,
- supporting construction with inlet of the product,
- inlet connection.

Pneumatic channel comprise internal adjustable and air throttling valve allowing setting of optimal cleaning.

Operation principle

Grain for cleaning flows into the machine with inlet connection onto the upper deck of sieves. Passing through an inlet box, it is distributed onto the whole width of the sieve. The upper deck separates the "big" impurities, like: strings, ears, straws, stones, pieces of broken glass, wood, etc. They are taken out from the machine by upper side outlet. The grain with smaller impurities flows onto the lower deck of sieves, where small impurities like: small and broken grains, weed seeds and sand are separated. These impurities are taken out by lower side outlet outside the machine. Overtails from lower deck are cleaned grains which flow from the central outlet of the separator.

Grain flows into pneumatic channel and falls gravitationally to outlet. Simultaneously impurities lighter than grain are separated and directed to aspiration installation.

Type	Max. capacity [t/h]		Air demand [m ³ /min]	Resistance [Pa]	Power [kW]	Weight [kg]		Volume [m ³]
	Initial cleaning	Proper cleaning				Net	Gross	
SSW100/100C + KPO100		8	87	500÷600	2x0,35	438	478	5,2
SSW100/100P + KPO100	33		87	500÷600	2x0,35	440	480	5,6
SSW100/150C + KPO100		12	87	500÷600	2x0,35	608	651	6,8
SSW100/150P + KPO100	50		87	500÷600	2x0,35	610	653	7,3
SSW100/200C + KPO100		16	87	500÷600	2x0,35	810	867	8,4
SSW100/200P + KPO100	66		87	500÷600	2x0,35	813	870	9,1
SSW150/200C + KPO150		24	130	500÷600	2x0,68	1105	1184	14,6
SSW150/200P + KPO150	100		130	500÷600	2x0,68	1108	1187	15,4

Note: Capacity for wheat and rye with humidity up to 15% and contamination 2÷3% (normal).

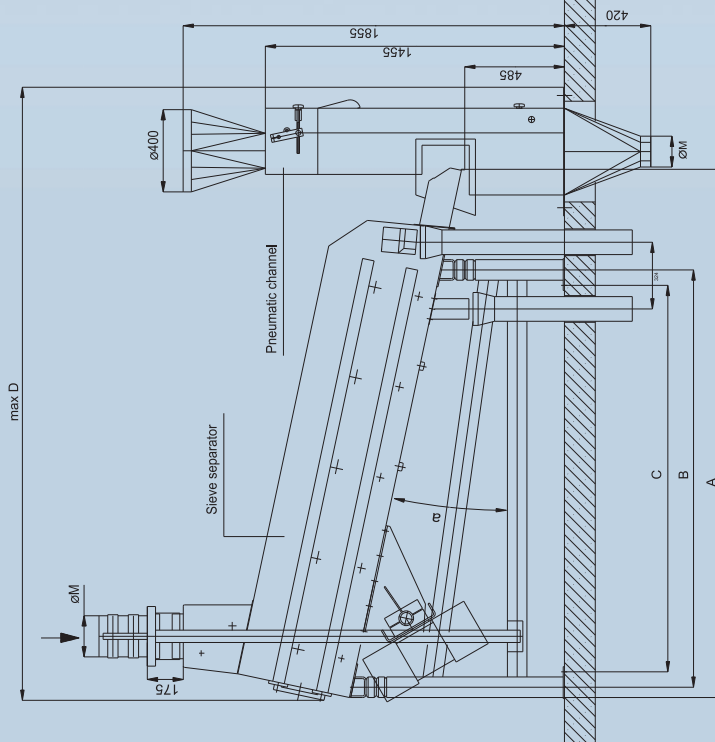
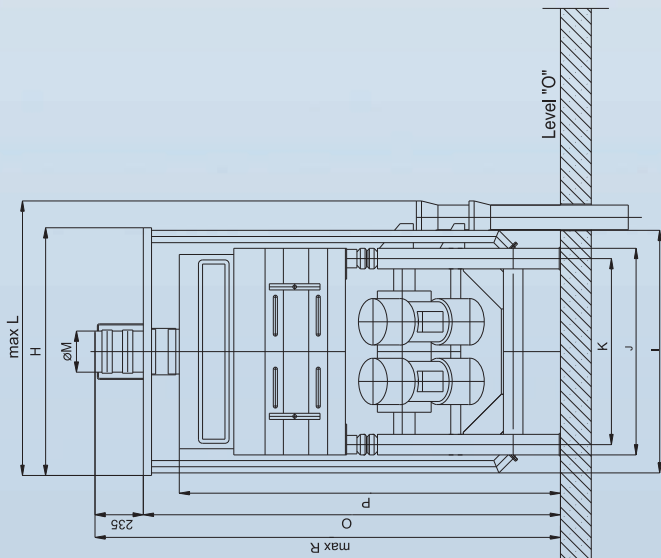
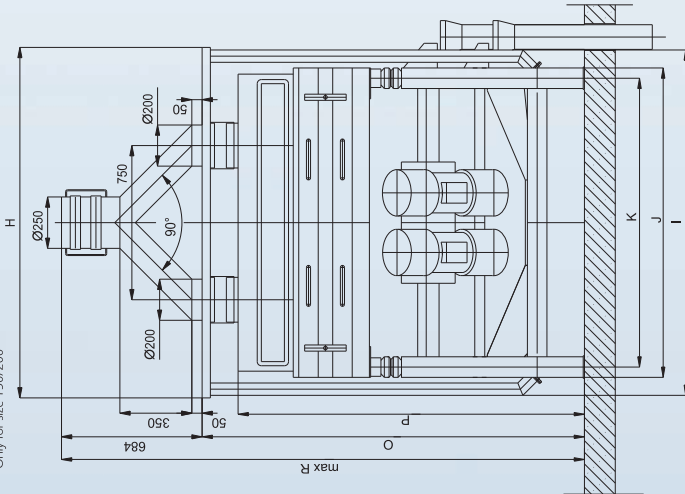
For grain with higher humidity and higher contamination, capacity is considerably lower (i.e. when humidity exceeded 22% - max 50% capacity).

For corn capacity is lower – about 90%.

For barley capacity is lower – about 80%.

Sieve Separator SSW with Pneumatic Channel KPO

Only for size 150/200



Dimension Type	α [°]	[mm]																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R
SSW100/100C + KPO100	6,8	1620	1040	890	1985	926	602	318	1205	1180	1005	905	1340	120	1720	1545	1955	
SSW100/150C + KPO100	8	2115	1535	1385	2480	1421	1592	318	1205	1180	1005	905	1340	150	1790	1615	2025	653
SSW100/200C + KPO100	8	2605	2030	1880	2975	1916	1592	306	1205	1180	1005	905	1340	200	1858	1683	2095	653
SSW100/100P + KPO100	12	1595	1052	902	1995	933	609	306	1205	1180	1005	905	1340	150	1825	1650	2060	903
SSW100/150P + KPO100	12	2085	1541	1391	2485	1422	1098	306	1205	1180	1005	905	1340	200	1930	1755	2165	903
SSW100/200P + KPO100	12	2575	2030	1880	2975	1911	1587	319	1705	1680	1505	1405	1865	150	2035	1860	2270	903
SSW150/200C + KPO150	8	2575	2030	1880	2975	1916	1592	319	1705	1680	1505	1405	1865	150	1945	1770	2630	903
SSW150/200P + KPO150	12	2585	2030	1880	2975	1911	1587	307	1705	1680	1505	1405	1865	250	2085	1910	2770	903

Manufacturer reserves the right for modifications of parameters and devices appearance in the course of its improvement.